ing a complete combination of all the piers and timber in the dam. If the piles are securely driven, together with the weight of filling, it will resist any pressure of water that can ever be brought against it. The sheeting on the entire dam will be water tight, so that none of the filling can possibly wash out, the water must of necessity. Keep a dam of this character constantly covered. This being the case it will last fifty years without repairs. It may be thought proper that reasons to sustain my opinions in regard to the permanency of the proposed dam be given. In the first place the coffer dam which was built around the lock foundation was constructed nearly as I propose to build the main body of the dam. This coffer dam was only a temporary affair, built in a temporary manner, and only designed to answer a temporary purpose; it had, up to the time it was torn up, stood for upwards of two years without any repairs, except at one small point near the lower corner, where it gave way at the bottom, but this was owing to some obstruction in the bottom of the river where the sheet-piling was not properly driven. It is true every freshet that went over it washed out some of the filling, but this is not to be wondered at as the top was entirely open, whereas the dam I propose will be covered in with jointed sheeting, three inches thick, and made water tight, if practicable, which I believe is entirely so.

I herewith furnish you an estimate of cost and plan of proposed dam:

ESTIMATE OF COST.

3,000 linear feet of piles, workmanship included, at 75 cents per linear foot,	$ 2,250	00
3,500 feet B. M. plank for sheeting and sheetpiling, workmanship included, at $35 per M feet,	1,225	00
2,000 pounds of spikes and nails, workmanship, &c., included, at 6 cents per pound,	120	00
1,500 pounds of iron bolts, workmanship included, at 10 cents per pound,	150	00